

UV Water Treatment  
Hydro-Optic™ Technology

## World's First Lumpfish Breeding Plant Uses Hydro-Optic™ UV for Water Biosecurity

The world's first breeding plant for lumpfish opened at Namdal Rensefisk AS in Flatanger, Norway, on March 27, 2019. Atlantium Technologies' Hydro-Optic™ (HOD) UV was chosen as the primary disinfection technology at the breeding plant. Atlantium's technology was specifically selected due to its history of proven performance in the aquaculture market combating viruses, fungus, algae and a wide variety of bacteria and delivering unparalleled water biosecurity. Teknor Systems, Atlantium's supplier in Norway, oversaw the HOD UV design and project execution.

Lumpfish has become the third largest farmed fish species in Norway in salmon production after it proved itself an efficient and eco-friendly weapon against salmon lice that are detrimental to salmon health.

### Why Atlantium HOD UV?

Atlantium has vast experience in the Norwegian Salmon farming market. The medium pressure HOD UV technology is unique in its ability to deliver a consistent and accurate UV dose, acting as a primary disinfection barrier. Atlantium conducted numerous tests on industry related pathogens in order to determine the most effective UV dose required to provide reliable and sustainable water biosecurity to Aquaculture facilities.

A study, "Disinfection of *Paramoebae perurans* with UV and ozone In situ dose-response testing," conducted by the NIVA and Marine Harvest, found that medium pressure UV lamps proved by far the most effective method for disinfection of the amoebae that causes Amoebic gill disease (AGD) compared to LP lamps, while ozone had little effectiveness on the amoeba.



**HOD™ UV ensures water biosecurity at the world's first breeding plant for lumpfish at Namdal Rensefisk AS in Flatanger, Norway.**